What is claimed is:

1.   An oscilloscope adapter for a portable electronic device, comprising:

a module adapted to interface with a hardware interface port of a portable electronic device having a processor and a display, the module including a computer program memory, the memory storing computer program instructions thereon to direct the processor to perform the steps of:

collecting data representative of an signal from an external source; and

displaying the data on the display as a waveform comprising individual data values as a function of time on a graph having a vertical axis and a horizontal axis, each axis having a scale.

2.   The adapter of claim 1 wherein the adapter further includes a database of model waveforms, and the instructions further direct the processor to display a model waveform from the database on the display.

3.   The adapter of claim 1 wherein the adapter further includes a database of collected waveform data, and the instructions further direct the processor to store the data representative of the signal in the database of collected waveform data.

4.   The adapter of claim 1 wherein the adapter or the electronic device contains a buffer, and the instructions further direct the processor to store the data

representative of the signal in the buffer.

5.   The adapter of claim 1 wherein the instructions further direct the processor to provide an electronic device input that, when activated by a user, allows the user to adjust the scale of one or both of the vertical axis and the horizontal axis.

6.   The adapter of claim 5 wherein the electronic device input that allows the user to adjust one or both scales is displayed on a setup screen.

7.   The adapter of claim 1 wherein the adapter further includes a language database containing data representative of words in a plurality of languages.

8.   A method of causing an electronic device to function as an oscilloscope, comprising:

connecting an adapter module to a hardware interface port of a portable electronic device having a processor, a display, and a memory;

delivering computer program instructions from the module to a processor for the electronic device;

collecting, using a plurality of leads connected to the electronic device, data representative of an signal from an external source;

displaying, in response to the computer program instructions, the data on the display as a waveform comprising individual data values as a function of time on a graph having a vertical axis and a horizontal axis, each axis having

a scale.

9.   The method of claim 8 wherein the adapter further includes a database of model waveforms, and the method further includes selecting a model waveform from the database and displaying the selected model waveform on the display.

10.   The method of claim 8 wherein the adapter further includes a database of collected waveform data, and the method further includes storing the data representative of the signal in the database of collected waveform data.

11.   The method of claim 8 wherein the adapter or the electronic device contains a buffer, and the method further includes storing the data representative of the signal in the buffer.

12.   The method of claim 8 comprising the additional step of adjusting the scale of one or both of the vertical axis and the horizontal axis.

13.   The method of claim 12 wherein the adjusting step is performed while a setup screen is displayed on the display.

14.   The method of claim 8 wherein the adapter further includes a language database containing data representative of words in a plurality of languages, and the method comprises the additional steps of translating text and displaying the translated text on the display.

15.   A plug-in module for a portable electronic device, comprising:

a means for interfacing with an electronic device; and

a computer program memory, the memory storing computer

program instructions thereon to direct a processor to perform the steps of:

collecting data representative of an signal from an external source;

and

displaying the data on a display of the electronic device as a

waveform comprising individual data values as a function of time on a graph

having a vertical axis and a horizontal axis, each axis having a scale.

16.   The module of claim 15 wherein the module further includes a

database of model waveforms.

17.   The module of claim 16 wherein the instructions further direct the

processor to display a model waveform from the database on the display.

18.   The module of claim 15 wherein the module further includes a

database of collected waveform data.

19.   The module of claim 18 wherein the instructions further direct

the processor to store the data representative of the signal in the database of

collected waveform data.